

الهيئة السعودية للمواصفات والمقاييس والجودة

Saudi Standards, Metrology and Quality Org. (SASO)



Final Draft Standard

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**Road vehicles – Impact protection for the driver
from the steering control system**

ICS: 43.020

This document is a draft Saudi Standard circulated for comments. It is, therefore, subject to alteration and modification and may not be referred to as a Saudi Standard until approved by SASO

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Road vehicles – Impact protection for the driver from the steering control system

1- Scope and field of the application

This standard specifies technical requirements for steering control systems that will minimize chest, neck, and facial injuries to the driver as a result of impact.

This standard applies to passenger cars, multipurpose passenger vehicles, trucks, and buses having a gross vehicle weight rating (GVWR) of 4,500 kg or less.

This standard does not apply to walk-in van.

2- Terms and definitions

For the purposes of this standard, the following terms and definitions are applied:

2.1 Passenger car

A motor vehicle with motive power, designed for carrying 10 persons or less including the driver and their luggage, except a low-speed vehicle, multipurpose passenger vehicle, or trailer.

2.2 Multipurpose passenger vehicle

A motor vehicle with motive power, designed to carry 10 persons or less or goods equivalent by weight which is constructed either on a truck chassis or with special features for occasional off-road operation. Except a low-speed vehicle or trailer

2.3 Truck

A motor vehicle with motive power, designed primarily for the transportation of property, special purpose equipment, or towing a trailer except a trailer.

2.4 Bus

A motor vehicle with motive power, designed for carrying more than 10 persons, except a trailer.

2.5 Steering control system

The basic steering mechanism and its associated trim hardware, including any portion of a steering column assembly that provides energy absorption upon impact.

3- Technical requirements

Each passenger car and each multipurpose passenger vehicle truck and bus with a gross vehicle weight rating (GVWR) of 4,500 kg or less shall meet the following requirements:

3.1 When the steering control system is impacted by a body block in accordance with standard⁽¹⁾, at a relative velocity of 24 km/h., the impact force on the chest of the body block transmitted to the steering control system shall not exceed 11,120 N, except for intervals whose cumulative duration is not more than 3 milliseconds.

3.2 The steering control system shall be so constructed that no components or attachments, including horn actuating mechanisms and trim hardware, can catch the driver's clothing or jewelry during normal driving maneuvers.

⁽¹⁾ Follow the standard SAE J944 JUN80 until the Saudi standard is adopted.

Bibliography

- [1] 49 Subtitle B-Chapter V-Part 571-Subpart B Section 203
(**FMVSS 571.203**) "Impact protection for the driver from the steering control system".